

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-3 (canceled)

Claim 4 (currently amended): The method of claim ~~+14~~, wherein the neural progenitor cell line is derived from human hippocampus.

Claim 5 (currently amended): The method of claim ~~+14~~, wherein the neural progenitor cell line is derived from human subventricular zone.

Claims 6 -13 (canceled)

Claim 14 (currently amended): A method for treating neurodegenerative and neuropsychiatric neurological, psychiatric and aging-related disorders comprising: the step of obtaining a stable neural progenitor cell line, wherein said cell line is

- a. derived from human central nervous system,
 - b. capable of expanding through at least ten cell-doublings in a substantially serum-free medium without differentiating, and
 - c. capable of differentiating into neurons and glia in the absence of mitogen; plating undifferentiated neural progenitor cells of said cell line into an assay plate precoated with extracellular matrix proteins at a density, wherein said density in a 96-well plate is between about 2,000 to about 125,000 cells per well;
- exposing the neural progenitor cells to at least one test agent;
- culturing the neural progenitor cells in a serum-free, mitogen-free medium for a minimum of three days;
- measuring a quantity of neurons;
- determining if said agent is capable of increasing said quantity of neurons; and
- if said agent is capable of increasing said quantity of neurons, administering a-fused imidazoleagent, as described in Structure Formula 1, to a patient in need thereof.

Claims 15-19 (canceled)

Claim 20 (previously presented): The method of Claim 14, wherein the individual is an adult human.

Claim 21 (new): The method of Claim 14, wherein the disorders are selected from the group consisting of Alzheimer's disease, dementia, mild cognitive impairment, aged-related cognitive decline, Parkinson's disease, amyotrophic lateral sclerosis, multiple sclerosis, demyelination, stroke, spinal injuries, traumatic injuries, neuropathic pain, depression, post-traumatic stress syndrome, stress, anxiety, schizophrenia, sleep deprivation, cognitive dysfunction and amnesia.

Claim 22 (new): The method of Claim 14, which further includes administering an effective amount of stem cells or progenitor cells.

Claim 23 (new): The method of claim 14, wherein the neural progenitor cell line is genetically modified to enhance the mitotic capacity of the cells.

Claim 24 (new): The method of claim 23, wherein the neural progenitor cell line is genetically modified to over-express c-myc in response to a conditional activation system.

Claim 25 (new): The method of claim 14, wherein the plating density is chosen to optimize a signal-to-noise ratio.

Claim 26 (new): The method of claim 14, which includes culturing the neural progenitor cells for a minimum of three days from the onset of differentiation of the cells.

Claim 27 (new): A method for treating neurological, psychiatric and aging-related disorders comprising:

obtaining a stable neural progenitor cell line, wherein said cell line is

derived from pluripotent or totipotent stem cells of human embryo,

capable of expanding through at least ten cell-doublings in a substantially serum-free medium without differentiating, and

capable of differentiating into neurons and glia in the absence of mitogen;

plating undifferentiated neural progenitor cells of said cell line into an assay plate pre-coated with extracellular matrix proteins at a density, wherein said density in a 96-well plate is between about 2,000 to about 125,000 cells per well;

exposing the neural progenitor cells to at least one test agent;

culturing the neural progenitor cells in a serum-free, mitogen-free medium for a minimum of three days;

measuring a quantity of neurons; and

determining if said agent is capable of increasing said quantity of neurons; and

if said agent is capable of increasing said quantity of neurons, administering said agent to an individual in need thereof.

Claim 28 (new): The method of Claim 29, wherein the disorders are selected from the group consisting of Alzheimer's disease, dementia, mild cognitive impairment, aged-related cognitive decline, Parkinson's disease, amyotrophic lateral sclerosis, multiple sclerosis, demyelination, stroke, spinal injuries, traumatic injuries, neuropathic pain, depression, post-

traumatic stress syndrome, stress, anxiety, schizophrenia, sleep deprivation, cognitive dysfunction and amnesia.

Claim 29 (new): The method of Claim 27, which further includes administering an effective amount of stem cells or progenitor cells.

Claim 30 (new): The method of claim 27, wherein the neural progenitor cell line is genetically modified to enhance the mitotic capacity of the cells.

Claim 31 (new): The method of claim 30, wherein the neural progenitor cell line is genetically modified to over-express c-myc in response to a conditional activation system.

Claim 32 (new): The method of claim 27, wherein the plating density is chosen to optimize a signal-to-noise ratio.

Claim 33 (new): The method of claim 27, which includes culturing the neural progenitor cells for a minimum of three days from the onset of differentiation of the cells.